

ABSTRACT OF THE DISCLOSURE

A projection television is provided that comprises an optical system having at least three image projectors for projecting respective images of different colors onto a projection screen, and a holographic reflector disposed in optical communication with the image projectors and the screen so that one of the projectors has a first optical path in a substantially orthogonal orientation with the screen and at least two of the projectors have respective optical converging toward the first optical path in a non-orthogonal orientation defining angles of incidence. The projection screen is formed from a three-dimensional hologram representing a three dimensional array of lenticular elements disposed on a substrate. The screen receives images from the projectors on a first side and displaying the images on a second side with controlled light dispersion of all the displayed images.